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ABSTRACT

To examine the influence that biological sex and psychological gender have on trait argumentativeness, 219 subjects were asked to complete the Argumentativeness Scale and the Revised Bem Sex-Role Inventory. Subjects were classified according to sex and gender, and two-way analysis of variance was conducted. Additionally, discriminate analysis was conducted to investigate how psychological gender discriminated among individuals on the tendency to approach and avoid arguments. Results of the analysis of variance indicated that males and females did not differ significantly on trait argumentativeness, but that individuals classified by psychological gender, regardless of biological sex, did differ significantly. Subjects classified as instrumental/leaders were significantly higher in trait argumentativeness than subjects identified as expressive, androgynous, or undifferentiated. Discriminate analysis revealed that expressive and undifferentiated individuals tended to avoid argumentative situations while instrumental/leaders and androgynous individuals did not. Argumentativeness avoidance tendencies were most pronounced in the expressive and least pronounced in the instrumental/leader identities. (Tables of results are appended.) (Author/MM)

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AN EXAMINATION OF BIOLOGICAL AND PSYCHOLOGICAL GENDER DIFFERENCES IN TRAIT ARGUMENTATIVENESS

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Abstract

This study examined the influence biological sex and psychological gender have on trait argumentativeness. Previous research suggested that males were higher in trait argumentativeness than females. This study sought to re-examine that finding while additionally testing the effect psychological gender has on argumentativeness general tendency.

Two hundred nineteen subjects completed the Argumentativeness Scale and the Revised Bem Sex-Role Inventory. Subjects were classified according to sex and gender, and two-way analysis of variance was conducted. Additionally, discriminate analysis was conducted to investigate how psychological gender discriminates individuals on tendency to approach and avoid arguments.

Results of the analysis of variance indicated that males and females did not differ significantly on trait argumentativeness, but that individuals classified by psychological gender, regardless of biological sex, differed significantly. Subjects classified as Instrumental/Leader were significantly higher in trait argumentativeness than subjects identified as Expressive Behavior, Androgynous or Undifferentiated. Discriminate analysis revealed that Expressive and Undifferentiated individuals tend to avoid argumentative situations while Instrumental/Leader and Androgynous individuals do not. Argumentativeness avoidance tendencies were most pronounced in Expressive and least pronounced in the Instrumental/Leader identities.

AN EXAMINATION OF BIOLOGICAL AND PSYCHOLOGICAL GENDER DIFFERENCES IN TRAIT ARGUMENTATIVENESS

Argumentative communication is a ubiquitous form of human communication. Arguing is a vital and necessary process in our democratic society, and is a pervasive activity in interpersonal and small-group decision-making, conflict resolution, and in social influence contexts in general. An argumentative situation may be conceived as where at least two people defend different positions on an issue, while attacking the positions of one another (Infante, 1981). In order to understand what it means for an individual to be argumentative, Infante and Rancer (1982) have developed a model of argumentativeness which combines trait and state components. A scale has been developed to measure Argumentativeness, and considerable evidence has been gathered to support its claims of reliability and validity (Infante & Rancer, 1982; Infante, 1982; Rancer & Infante, 1983).

Argumentativeness was defined as a generally stable trait which predisposes an individual in communication situations to advocate positions on controversial issues and to attempt refutation of the positions which other people take on those issues. This was differentiated conceptually and empirically from verbal aggressiveness, attacking a person's self-concept instead of his or her position on an issue (Infante & Rancer, 1982).

An individual's general trait to be argumentative, ARG_{gt}, was conceived as an interaction of two competing motivational tendencies, motivation to approach arguments, ARG_{ap}, and motivation to avoid argumentative situations, ARG_{av}. The tendency to avoid arguments is viewed as a debilitating factor,

weakening the tendency to approach arguments by the anxiety associated with arguing.

Recent research on the argumentativeness construct has begun to develop a body of knowledge regarding what it means to be argumentative, and this research has revealed several differences in the communicative behavior of individuals who differ in this trait predisposition. Infante (1981) has discovered that when high argumentatives argue, they are perceived as more inflexible, interested in the discussion, more verbose, more willing to attack and defend positions, seem more expert, more dynamic, intend to exert more effort to win the argument, and are perceived as more skilled in arguing. High argumentatives were also found to have received more high school training in arguing, were born earlier in the family birth order, preferred smaller sized classes, and were more liberal (Infante, 1982). Rancer and Infante (1983) found that motivation to argue is highest when a high argumentative anticipates arguing with another high argumentative. As required by the model, high argumentatives are not more likely than low or moderate argumentatives to prefer verbally aggressive message strategies (Infante, Trebing,Shepherd & Seeds, 1983), however, it has been found that the highly argumentative individual is more likely to be the recipient of verbal aggression (Infante, Wall, Leap & Danielson, 1983).

Of the recent research attempting to examine what it means to be argumentative, one of the most important findings that has been uncovered is that there appears to be sex differences in argumentativeness. Infante (1982) has found that males are significantly more argumentative than females. This finding has been explained from a social learning framework. Eakins and Eakins (1978) suggest that males have been conditioned to be more competitive and assertive than females. Infante (1983) suggests that a speculation for this finding might be that

women view arguing (an aggressive, competitive form of communication) as incompatible with societal sex-role expectations for females, and thus develop a stronger inhibition to this form of communication. Another speculation advanced by Infante (1983) for this sex difference in trait argumentativeness is that females argue less because males argue too much. Societal power differences and entrenched dominance-submission patterns are also suggested by Infante (1983) to explain sex differences in argumentativeness.

Regardless of the underlying explanation for this difference in trait argumentativeness, a growing body of research tends to support the finding that males and females differ, and that females are significantly lower in the trait predisposition. Schultz and Anderson (1982) examining the role of argument in negotiation, administered the Argumentativeness Scale (Infante & Rancer, 1982) to a large group of individuals. They found that women were consistently over-represented in the low argumentative tail of the distribution. Subsequent interviews with low argumentative females revealed that they viewed arguing unfavorably. "Unfeminine" and "unfriendly" were two attributes females associated with arguing. Further, when asked to analyze simulated conflict situations, Schultz and Anderson (1982) found that the females did not have the skills to diagnose the conflict, nor the ability to make recommendations to manage the conflict productively.

Although somewhat different in its conceptualization than argumentativeness, contentiousness, one dimension of Communicator Style (Norton, 1978) has been investigated with regard to sex differences. While argumentativeness is viewed as a favorable and functional communication predisposition (Infante & Rancer, 1982), contentiousness as a dimension of communicator style has somewhat unfavorable and dysfunctional connotations associated with it (Norton, 1978). Norton (1978) operationally defines

the contentious individual as someone who constantly quarrels and disputes others who is thought of as belligerent and the cause of interpersonal unrest. Related literature suggests a tendency for males to be more contentious than females (Cashell, 1978). Cashell (1978) has found men to be more self-assertive than women in their linguistic style. Montgomery and Norton (1981) investigating sex differences and similarities in communicator style found that males and females did not differ significantly on the dimension of contentiousness.

The potential consequences of females being lower than males in argumentativeness are compelling and important. If females do indeed argue less, they may be less likely to acquire the benefits research suggests result from arguing: a positive effect on learning due to stimulation and curiosity; improved accuracy in social perspective-taking which facilitates self-concept development and social intelligence; a reduction in ego-centric thinking; greater creativity; enhanced problem-solving and decision-making (Johnson & Johnson, 1979). Infante (1983) suggests that on a global level, if a group argues less, it has less potential for achieving social influence. Schultz and Anderson (1982) view arguing as an element essential in the negotiating process. Schultz (1982) found that argumentative indiv duals in a group situation were selected as leaders more often than less argumentative members, and exerted a stronger influence on group decisions. As Schultz and Anderson (1982) suggest, women will need to be perceived as leaders if they are to move up through the organizational hierarchies, and passivity is rarely an attribute associated with potential leadership.

Infante (1983) drawing upon previous research indicating that females are lower in trait argumentativeness than males, sought to explore processes for increasing and enhancing the

argumentative behavior of women. Infante tested the speculation that if low argumentative females are cued with relevant lines of argument, this cueing might stimulate their inventional processes and enhance their argumentative behavior. It was further hypothesized that such cueing should not influence the argumentative behavior of high argumentative females, whose inventional processes are already active. Results of the study supported those speculations. Cueing significantly enhanced the argumentative behavior of low argumentative females, but did not impact on the communication behavior of high argumentative females.

The aforementioned research appears to indicate that: (1) arguing, or argumentativeness is an important and functional communication behavior and communication predisposition; (2) females appear to be significantly lower in trait argumentativeness than males, e.g., females argue less and view arguing less favorably than males; and (3) unfavorable attitudes toward arguing and lack of skill in argument (rhetorical invention) may be disfunctional to females.

It should be noted that this body of research suggesting that there are sex differences in argumentativeness has drawn solely upon biological sex as the means of classifying individuals in order to investigate differences in the trait predisposition. None of the previous research has investigated the influence psychological gender has on trait argumentativeness. Are <u>females</u> lower in trait argumentativeness, or are <u>individuals</u> high in expressive behavior (femininity) lower in trait argumentativeness? Almost a decade of research in social psychology and communication points out the impact that psychological gender has on a wide range of communication behaviors (Bem, 1974; Putnam & McCallister, 1980; Isenhart, 1980; Greenblatt, Hasenauer & Friemuth, 1980; Montgomery & Burgoon, 1977, 1980; Brunner & Phelps, 1980;

Wheeless & Duran, 1982; Patton, Jasnoski & Skerchock, 1977; Eman, Dierks-Stewart & Tucker, 1978; Kebis, Reynolds & Mabry, 1980; Albrecht & Cooley, 1980; LaFrance & Carmen, 1980; Flaherty & Dusek, 1980; Ansell, 1980).

The conceptualization of psychological gender rejects the dichotomization of individuals purely on the basis of biological sex. Psychological gender refers to the stereotypical masculine and feminine behaviors internalized by individuals regardless of their biological sex. With increasing frequency, researchers in the social sciences, and communication researchers in particular, are abandoning the use of biological sex as the sole predictor or antecedent variable in studies attempting to uncover "sex differences" in communication behaviors and cognitions. The categorization of individuals purely by biological sex fails to allow the full realization of personal qualities that individuals draw from both human dimensions of femininity and masculinity.

Given the importance and ubiquity of argumentative communication in society, the confusing and contradictory findings of research reporting sex differences in communication from a biological classification (Dierks-Stewart, 1980; Markel, Long & Saine, 1976; Montgomery & Norton, 1981), and the recent research attempting to influence and alter the argumentative behavior of females (Infante, 1983; Schultz & Anderson, 1982), it appears crucial to re-examine the reported sex difference in argumentativeness from a psychological gender perspective.

At the current time, very little attention has been focused on the relationship between sex role identification (psychological gender) and trait argumentativeness. It is important for advancing the theoretical base of knowledge about argumentativeness that the psychological gender of individuals be recognized and assessed when investigating behavior and perceptions accompanying informal argument. Thus, this study attempted to assess the

relationship between psychological sex and trait argumentativeness in an attempt to refine previous findings reporting sex differences in argumentativeness observed when individuals were classified solely by biological sex.

Specifically, this study addressed the following four research questions:

Q_1: Are there significant differences between males and females on trait argumentativeness?

Q_2: Are there significant differences between psychological gender types on trait argumentativeness?

Q_3: Is there a significant interaction between psychological gender and biological sex on trait argumentativeness?

Q_4: How does psychological gender discriminate individuals on tendency to approach and avoid arguments?

METHOD

Subjects

Subjects were drawn from students enrolled in basic undergraduate communication courses at a small, private Eastern communication college. Subjects who participated in the study did so voluntarily, and received extra-credit toward their respective course. Two hundred nineteen subjects participated

in the study. There were 97 males and 122 females in the sample.

Instrumentation

Argumentativeness

Trait Argumentativeness was measured by employing the Argumentativeness Scale (Infante & Rancer, 1982). The Argumentativeness Scale is a 20-item scale composed of ten items for measuring ARG_{ap} (motivation to approach arguments), and ten items for measuring ARG_{av} (motivation to avoid arguments). The difference between these two motivational tendencies, ARG_{gt}, is the computed measure of general trait argumentativeness. Infante and Rancer (1982) report high internal consistency for the two factors of approach and avoidance (.91 and .86 respectively, Cronbach's coefficient alpha) and high test-retest reliability for the computed general tendency ARG_{gt} score, .91. Infante and Rancer (1982) also report considerable construct, criterion, convergent and discriminant validity for the Argumentativeness Scale. Recent research also pertains favorably to the reliability and validity of the scale (Infante, 1982; Rancer & Infante, 1983).

On the basis of the norms established for the scale (Infante & Rancer, 1982), subjects were classified as high ($ARG_{gt} > 13$), moderate ($ARG_{gt} \leq 13, > -5$), and low argumentatives ($ARG_{gt} < -5$).

Psychological Gender

Psychological gender was measured by employing a revised version of the Bem Sex-Role Inventory (BSRI) developed by Wheeless and Dierks-Stewart (1981). While the original BSRI has been employed in numerous studies investigating psychological gender (Kebis, Reynolds & Mabry, 1980; Greenblatt, Hasenauer &

Freimuth, 1980; Montgomery & Burgoon, 1980; Eman, Dierks-Stewart & Tucker, 1978; Putnam & McCallister, 1980) sufficient criticism (Dierks-Stewart, 1980; Pedhazur & Tetenbaum, 1979; Locksley & Colten, 1979; Spence & Helmreich, 1979; Wheeless & Dierks-Stewart, 1980a, 1980b) prompted a revision of the instrument (Wheeless & Dierks-Stewart, 1981).

A re-examination of the 20-items measuring masculinity and femininity per dimension prescribed by Bem (1974) indicated that they were not the best discriminators of psychological gender. A modification of the BSRI with increased reliability and validity is provided by Wheeless and Dierks-Stewart (1981). It contains two dimensions: Expressive Behavior (Femininity) and Instrumental/ Leader (Masculinity), each composed of ten items. Thus, this revised instrument was employed to measure psychological gender in the present study.

Subjects were classified into psychological gender types by the median-split procedure. Medians for the Instrumental/Leader and Expressive Behavior dimensions were computed. The median for the Instrumental/Leader identity was 49.64, and the median for the Expressive Behavior identity was 56.56. Subjects scoring greater than or equal to the instrumental median, and less than the expressive median were classified into the Instrumental/Leader identity. Subjects scoring less than the instrumental median and greater than or equal to the expressive median were classified into the Expressive identity. If subjects scored greater than or equal to the instrumental and expressive medians, they were classified as Androgynous, and if they scored less than the instrumental and expressive medians, they were classified as Undifferentiated.

Procedures

Both instruments, the Argumentativeness Scale (Infante & Rancer, 1982) and the revised BSRI (Wheeless & Dierks-Stewart, 1981) were

distributed to several sections of regularly scheduled introductory communication classes by the respective course instructor. All instructions presented by the instructor were standardized. Subjects were told that the Communication Studies Division of the college is interested in understanding more about people's perceptions of communication. Subjects were also told that their participation in the study was entirely voluntary, and than no names needed to be put on the survey.

Subjects were further instructed that their instructor would not see any of the surveys, and that the surveys would be forwarded immediately to the researchers. A separate sheet was distributed which subjects could sign (if they participated) in order to receive the extra course credit.

In addition to the two instruments, a cover sheet was attached which asked subjects to indicate their year in school, and their sex. Upon completion of the study, subjects were informed of its purpose.

Design and Data Analysis

The first three research questions posed in this investigation were examined by conducting a two-way analysis of variance with the two factors of biological sex (male, female) and psychological gender (instrumental/leader/masculine, expressive behavior/feminine, androgynous and undifferentiated). The dependent variable in this analysis was ARG_{gt}, the measure of general trait argumentativeness.

In order to test research question 4, a multiple discriminant analysis was employed to determine the linear combinations of the variables ARG_{ap} and ARG_{av} maximizing the differences between the four (instrumental, expressive, androgynous, undifferentiated) groups respectively.

Results

Reliability of Argumentativeness Scale

The reliability of the Argumentativeness Scale (Infante & Rancer, 1982) was assessed for the subjects who participated in this investigation. Internal consistency of the two dimensions composing trait argumentativeness was assessed by employing Cronbach's coefficient alpha (1951). ARG_{ap}, the individual's tendency to approach argumentative situations obtained a coefficient alpha of .84, and coefficient alpha for ARG_{av}, the individual's tendency to avoid argumentative situations was assessed at .81. The obtained alpha coefficients for the Argumentativeness Scale thus met the standards of acceptability for the social sciences.

Reliability of the Revised Bem Sex-Role Inventory

The reliability of the revised Bem Sex-Role Inventory (Wheeless & Dierks-Stewart, 1981) was assessed for this investigation. Cronbach's coefficient alpha (1951) was employed as the measure of internal consistency for the two dimensions of Instrumental/Leader (Masculinity), and Expressive Behavior (Femininity). Coefficient alpha for the Instrumental/Leader and Expressive Behavior dimensions were .83 and .85 respectively. The obtained alpha coefficients for the Revised Bem Sex-Role Inventory thus met the standards of acceptability for the social sciences.

Test of the Research Questions

Research Questions 1 and 2 asked whether there are significant differences between males and females, and between instrumental/leader, expressive behavior, androgynous and undifferentiated individuals on trait argumentativeness (ARG_{gt}). Research Question 3 asked whether there was an interaction between biological sex and psychological gender on trait argumentativeness.

In order to address those three research questions, the data collected was subjected to two-way analysis of variance for unequal n utilizing the SPSS ANOVA regression approach option. The cell means for ARG_{gt} can be found in Table 1.

Table 1 about here

With regard to biological sex, no significant differences were found between males and females (F=1.16, df=1/211, $p > .05$). However, a significant main effect was obtained for the Identity factor (F=6.98, df=3/211, $p < .001$). The Newman-Keuls procedure was then employed as the multiple comparison test of the four sample means to locate the source of the difference. Table 2 reports the results of this test.

Table 2 about here

Individuals classified as Instrumental/Leaders were significantly higher in trait argumentativeness than those classified as Expressive, Androgynous and Undifferentiated. There were no significant differences between the Expressive, Androgynous and Undifferentiated groups on ARG_{gt}.

Research Question 3 asked whether there were interaction effects between the independent factors of biological sex and psychological gender on general tendency to be argumentative. No significant interaction effects were observed for the sex and gender factors ($F=0.05$, $df=3/211$, $p > .05$).

In order to further examine identity effects with regard to the argumentativeness construct, a multiple discriminant analysis was conducted. The two factors comprising ARG_{gt} (ARG_{ap} and ARG_{av}) were used as the discriminating variable set. This analysis yielded one significant discriminant function accounting for 86 percent of the total variance accounted for by the functions. Table 3 reports the results of the multiple discriminant analysis by Identity.

Table 3 about here

This function's discriminating variable was the dimension of ARG_{av}. Group centroids for this function were -.50, Instrumental; -.08, Androgynous; .12 Undifferentiated; and .40, Expressive. These results indicate that those individuals classified as Expressive and Undifferentiated under the gender identity paradigm tend to avoid situations they perceive as argumentative. This avoidance tendency is most pronounced with

the Expressive identity.

Conversely, individuals classified as Instrumental and Androgynous do not avoid argumentative situations, the Instrumental identity exhibits the least avoidance of all identities while individuals classified as Androgynous score closer to the zero point.

DISCUSSION

The benefits associated with argumentative skill and an argumentative predisposition have been suggested by several researchers in communication and related disciplines (Infante, 1983; Schultz, 1982; Schultz & Anderson, 1982; Infante, 1981; Johnson & Johnson, 1979). The argumentative individual appears to enjoy a host of potential rewards found in both personal and professional contexts. Individuals with a predisposition toward argumentative communication might expect to be less compliant, be perceived as potential leaders, be more intelligent, more creative and more influential. Thus, the argumentativeness trait is suggested to have functional consequences in a person's life.

Previous research indicates sex differences in trait argumentativeness. Males and females differ significantly, with males emerging as higher in the trait predisposition. In light of current research efforts directed at understanding individuals communication styles and predispositions from a psychological gender orientation, rather than from dichotomous biological classifications, this study attempted to examine potential differences in trait argumentativeness according to the gender-

identity framework.

Unlike previous research, this investigation did not find significant differences in trait argumentativeness when individuals were classified by biological sex. Rather, the significant finding of this study centers on differences in trait argumentativeness when males and females were classified according to the gender-identity paradigm. Those individuals classified as Instrumental/Leader were significantly higher in trait argumentativeness than individuals classified as Expressive, Androgynous or Undifferentiated. Additionally, this study found no significant differences between the latter three groups on ARG_{gt}.

Results of a multiple discriminant analysis by identity produced one significant function whose discriminating variable was the dimension of ARG_{av}, the tendency to avoid arguments. Results of this analysis followed previous gender-identity research findings. Instrumental/Leaders are by operational definition more assertive, forceful, aggressive, and competitive. Thus, this gender-typed individual would be unlikely to avoid situations perceived as argumentative. Conversely, individuals classified as Expressive have different self-characterizations and value more "social" attributes such as tenderness, gentleness and sensitivity. As such, this group whose compassion and more pronounced interpersonal orientation could operate so as to make them more likely to avoid situations they perceive as argumentative.

The group centroid of the individuals classified as Androgynous, accenting the identities of Instrumental/Leaders and Expressives together into a multidimensional view of self, was close to zero (-.08) but slightly negative on tendency to avoid arguments. This finding appears consistent with previous research conducted on the androgynous individual. Androgynous

people have been characterized as having maximum behavioral flexibility and sensitivity to situational conditions. The androgynous individual has the freedom from sex-role constraints to engage in whatever communication behavior seems appropriate in the particular context. The androgynous identity did not emerge with high or low argumentative avoidance tendencies in this investigation thus permitting flexibility in situations which are argumentative in nature.

The individuals classified as Undifferentiated also tended to emerge as somewhat more likely to avoid argumentative communication. Although a paucity of research exists regarding this gender-identity classification, the operational definition of undifferentiated obtained by employing the revised BSRI (Wheeless & Dierks-Stewart, 1981) suggests that this person does not highly endorse attributes associated with either expressive behavior or instrumental leadership. This person is neither expressive nor assertive and one could argue that the undifferentiated individual may not manifest communication competence. The ability and predisposition to defend your position and to verbally challange others' positions on controversial issues requires some degree of communication competence, rhetorical invention, and rhetorical and presentational skill. A lack of these abilities might make one more likely to avoid situations perceived as argumentative in nature.

The results of this study did not support previous research conducted on trait argumentativeness which uncovered sex differences in the trait based on biological classification. Rather, the results of this investigation appear to be consistent with the research reported by Montgomery and Norton (1981) who found males and females did not differ in their self-perceptions of contentiousness. Recall, however, the Communicator Style dimension of contentiousness and the trait predisposition of

Argumentativeness are different in their conceptualizations. Norton's (1978) view of contentiousness is represented by the individual who constantly quarrels and disputes others, and who is thought of as belligerent and the cause of interpersonal unrest. This operational definition of contentiousness suggests an unfavorable and dysfunctional set of communication behaviors. The Infante and Rancer (1982) conceptualization of Argumentativeness does not suggest any unfavorability or dysfunctionality associated with arguing. Rather than being the cause of interpersonal unrest, Infante (1982) reports that satisfaction with interpersonal relations and ability to relate to peers are not deficient for high argumentatives. Again, the ability to defend one's position and to verbally challenge others' positions on controversial issues is suggested as a favorable communication predisposition (Infante & Rancer, 1982).

One reason for the lack of sex (biological) differences in this investigation might be due to confusion with the terms arguing and arguments. The terms arguing and argument are not defined when subjects are presented with the Argumentativeness Scale. Hence, confusion might have arisen as to the favorability or unfavorability, desirability or undesirability of those terms by the present sample of subjects. Arguing and argument as conceptualized by Infante and Rancer (1982) might have been perceived as contentiousness as envisioned by Norton (1978) by the subjects in this study. If this is conceivable, it might account for why the results were more consistent with the research reported by Montgomery and Norton (1981) showing no sex differences, and less consistent with previous research on argumentativeness reporting sex differences (Infante, 1982; Schultz & Anderson, 1982).

Another plausible reason for the lack of sex differences in trait argumentativeness in this study might be that females are

beginning to view arguing and argumentative communication more favorably than they have in the past. As females are being socialized in a more consistent fashion as males have been in our society regarding the necessity of advocacy and argument in personal and professional contexts, their view of arguing as an "unfriendly" or "unfeminine" communication behavior may be changing. As females continue to occupy with more frequency positions which demand argumentative skill and an argumentative predisposition (e.g., lawyers, negotiators, corporate executives) these new role models might serve to equalize perceptions of arguing.

An outcome of this study's finding that males and females do not differ significantly in trait argumentativeness but that individuals classified differentially by psychological identity do, is to redirect any remediation program designed to enhance the argumentative ability of low argumentative females. If argumentative skill and an argumentative predisposition are viewed as desirable in personal and professional contexts then programs designed to enhance those skills (Infante, 1983; Schultz & Anderson, 1982) in females might neglect to treat all who could benefit from them. As evidenced by the results of this study, individuals classified as expressive,regardless of biological sex, might profit from enhancing their perceptions of argumentative communication and improving their rhetorical invention and argumentative skill.

This study represents only the first attempt to shed additional light on argumentativeness from an examination of the influence psychological gender has on the trait predisposition. The strong influence of the identity variable found in this study, and the lack of sex differences noted from a biological classification, urge that replication take place. The desire and ability to advocate and verbally defend one's positions are

attributes that are being demanded of more and more people as careers become more focused on communication and information dissemination. It is crucial that we investigate further how biological sex and psychological gender factors influence argumentative predispositions and argumentative behavior.

Table 1

Cell Means for Trait Argumentativeness

(ARG_{gt})

Condition	ARG_{gt}
Instrumental/Leader Male (n=34)	13.18
Instrumental/Leader Female (n=19)	12.26
Expressive Behavior Male (n=19)	3.63
Expressive Behavior Female (n=33)	2.12
Androgynous Male (n=18)	9.44
Androgynous Female (n=40)	6.75
Undifferentiated Male (n=26)	6.19
Undifferentiated Female (n=30)	4.50

Note: The higher the mean, the greater the argumentativeness general tendency.

Table 2

Newman-Keuls test for Identity Group Means

Ranges for the .05 alpha level

2.81 3.34 3.67

homogeneous subsets (subsets of groups, whose highest and lowest means do not differ by more than the shortest significant range for a subset of that size)

Group Mean	Expressive	Undifferentiated	Androgynous
	2.67	5.28	7.59

Group Mean	Instrumental/Leader
	12.85

Table 3

Multiple Discriminant Analysis by Identity

Canonical Discriminant Function

Function	Eigenvalue	%of Variance	Wilks' Lambda	ChiSquare	df	Significance
1	.123	86.29	.873	29.07	6	.0001

Test of Equality of Group Covariance Matrices

Box's M	Approximate F	df	Significance
15.64	1.71	9/514,232	.08

Discriminant Structure Coefficients

	Function 1
ARG_{av}	.975*
ARG_{ap}	-.652

Group Centroids

Instrumental	-.50
Androgynous	-.08
Undifferentiated	.12
Expressive	.48

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